

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007**IN THE CLAIMS**

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (cancelled)
6. (cancelled)
7. (cancelled)
8. (cancelled)
9. (cancelled)
10. (cancelled)
11. (cancelled)
12. (cancelled)
13. (cancelled)
14. (cancelled)
15. (cancelled)
16. (cancelled)
17. (cancelled)
18. (cancelled)
19. (withdrawn) A vehicle occupant restraint system of Claim 3 wherein:  
said selective non-catalytic reducing compound is urea ( $\text{H}_2\text{NCONH}_2$ ).
20. (withdrawn) A vehicle occupant restraint system of Claim 3 wherein:  
said selective non-catalytic reducing compound is cyanuric acid ( $\text{HNCO}$ )<sub>3</sub>.
21. (currently amended) A vehicle occupant restraint system comprising:

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

an inflatable air bag;  
a gas generator for inflating said air bag;  
a nitrogen-containing gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and  
a selective non-catalytic reducing compound placed within said gas generator in heterogeneous relation to said gas generant composition, wherein said selective non-catalytic reducing compound is selected from ~~ammonium-sulfate~~ the group consisting of ammonium salts and amine-containing compounds,  
wherein at least one mol of the selective non-catalytic reducing compound is added per one mol of nitrogen oxide or nitrogen dioxide produced upon combustion of said gas generant composition.

22. (cancelled)

23. (currently amended) A vehicle occupant restraint system comprising:

an inflatable air bag;  
a gas generator for inflating said air bag;  
a nitrogen-containing nonazide gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and  
a selective non-catalytic reducing compound placed within said gas generator in heterogeneous relation to said gas generant composition, wherein said selective non-catalytic reducing compound is selected from ~~ammonium-sulfate~~ the group consisting of ammonium salts and amine-containing compounds,  
wherein at least one mol of the selective non-catalytic reducing compound is added per one mol of nitrogen oxide or nitrogen dioxide produced

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

upon combustion of said gas generant composition.

24. (cancelled)

25. (currently amended) A vehicle occupant restraint system comprising:

an inflatable air bag;

a gas generator for inflating said air bag;

a gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and

a selective non-catalytic reducing compound proximate to, separate from, and interspersed about the gas generant composition within said gas generator, wherein said selective non-catalytic reducing compound is selected from ~~ammonium-sulfate~~ the group consisting of ammonium salts and amine-containing compounds,

wherein at least one mol of the selective non-catalytic reducing compound is added per mol of nitrogen oxide or nitrogen dioxide produced upon combustion of said gas generant composition.

26. (cancelled)

27. (currently amended) A vehicle occupant restraint system comprising:

an inflatable air bag;

a gas generator for inflating said air bag;

a gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and

a selective non-catalytic reducing compound placed proximate to, separate from, and interspersed about the gas generant composition within said gas generator, wherein said selective non-catalytic reducing compound is selected from ~~ammonium-sulfate~~ the group consisting of ammonium salts, amides, imides, and amine-containing

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007compounds.

wherein at least one mol of the selective non-catalytic reducing compound is added per mol of nitrogen oxide or nitrogen dioxide produced upon combustion of said gas generant composition.

28. (cancelled)

29. (currently amended) A vehicle occupant restraint system comprising:

- an inflatable air bag;
- a gas generator for inflating said air bag;
- a nonazide gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and
- a selective non-catalytic reducing compound placed proximate to, separate from, and interspersed about the gas generant composition within said gas generator, wherein said selective non-catalytic reducing compound is selected from ~~ammonium sulfate~~ the group consisting of ammonium salts, amides, imides, and amine-containing compounds.

wherein at least one mol of the selective non-catalytic reducing compound is added per mol of nitrogen oxide and/or nitrogen dioxide produced upon combustion of said gas generant composition.

30. (cancelled)

31. (currently amended) A vehicle occupant restraint system comprising:

- an inflatable air bag;
- a gas generator for inflating said air bag;
- a nitrogen-containing gas generant composition located within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

combustion thereof; and

a selective non-catalytic reducing compound placed proximate to and interspersed about said gas generant composition, wherein said selective non-catalytic reducing compound is ~~ammonium sulfate~~ selected from the group consisting of ammonium salts,

wherein at least one mol of the selective non-catalytic reducing compound is added per mol of nitrogen oxide or nitrogen dioxide produced upon combustion of said gas generant composition.

32. (cancelled)

33. (cancelled)

34. (new) A vehicle occupant restraint system comprising:

an inflatable air bag;

a gas generator for inflating said air bag;

a nitrogen-containing gas generant composition within said gas generator that forms nitrogen oxide and/or nitrogen dioxide upon combustion thereof; and

a selective non-catalytic reducing compound placed within said gas generator in heterogeneous relation to said gas generant composition, wherein said selective non-catalytic reducing compound is selected from the group consisting of ammonium salts, amides, imides, and amine-containing compounds,

wherein at least one mol of the selective non-catalytic reducing compound is added per one mol of nitrogen oxide or nitrogen dioxide produced upon combustion of said gas generant composition.

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

35. (new) The vehicle occupant restraint system of claim 34 wherein said gas generant composition is extruded into a desirable shape and upon combustion yields gases comprising NO<sub>x</sub> gas, and, said reducing compound contains at least one mole of elemental nitrogen per one mole of NO<sub>x</sub> produced by the gas generant composition upon combustion and is discretely interspersed about the gas generant composition.

36. (new) The vehicle occupant restraint system of claim 34 wherein said gas generant composition comprises at least one material of each of the following functional groups of materials – a) a fuel selected from the group of azole compounds consisting of triazole, aminotetrazole, tetrazole, bitetrazole, and metal salts of these compounds; b) an oxygen containing oxidizer compound selected from the group consisting of alkali metal, alkaline earth metal, lanthanide and ammonium nitrates and perchlorates or from the group consisting of alkali metal and alkaline earth metal chlorates and peroxides; and c) a low-temperature slag forming material which is sufficient in amount during combustion to cause the solid combustion particles to coalesce into easily filterable slag or clinkers but not so much as to make a low viscosity liquid, selected from the group consisting of silicon dioxide, boric oxide and vanadium pentoxide or from the group consisting of alkali metal silicates, borates, and carbonates or from the group consisting of naturally occurring clays and talcs, and, the gas generant composition is extruded into a desirable shape and combusts to yield gases comprising NO<sub>x</sub> gases, and, the reducing compound contains at least one mole of elemental nitrogen per one mole of NO<sub>x</sub> produced by the gas generating mixture upon combustion, and is interspersed about the gas generant composition.

37. (new) The vehicle occupant restraint system of claim 34 wherein said nitrogen-containing gas generant composition produces nitrogen oxide and/or nitrogen dioxide upon combustion thereof and said selective non-catalytic reducing compound is proximate to and heterogeneously interspersed about said gas generant composition,

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

whereby said reducing compound reduces the nitrogen monoxide and/or nitrogen dioxide produced from combustion of said gas generant composition.

38. (new) The vehicle occupant restraint system of claim 35 wherein said nitrogen-containing gas generant composition produces nitrogen oxide and/or nitrogen dioxide upon combustion thereof and said selective non-catalytic reducing compound is proximate to and heterogeneously interspersed about said gas generant composition, whereby said reducing compound reduces the nitrogen monoxide and/or nitrogen dioxide produced from combustion of said gas generant composition.

39. (new) The vehicle occupant restraint system of claim 36 wherein said nitrogen-containing gas generant composition produces nitrogen oxide and/or nitrogen dioxide upon combustion thereof and said selective non-catalytic reducing compound is proximate to and heterogeneously interspersed about said gas generant composition, whereby said reducing compound reduces the nitrogen monoxide and/or nitrogen dioxide produced from combustion of said gas generant composition.

40. (new) A vehicle occupant restraint system of Claim 34 wherein:  
said selective non-catalytic reducing compound is selected from the group consisting of ammonium carbonate  $((\text{NH}_4)_2\text{CO}_3)$ , ammonium sulfate  $((\text{NH}_4)_2\text{SO}_4)$ , ammonium chloride  $(\text{NH}_4\text{Cl})$ , ammonium carbamate  $(\text{H}_2\text{NCO}_2\text{NH}_4)$ , and ammonium fluoride  $(\text{NH}_4\text{F})$ .

41. (new) The vehicle occupant restraint system of claim 21 wherein said selective non-catalytic reducing compound is ammonium sulfate.

42. (new) The vehicle occupant restraint system of claim 23 wherein said selective non-catalytic reducing compound is ammonium sulfate.

Serial No. 09/638,606

Atty Docket No. GIO-007-US  
5702-00007

43. (new) The vehicle occupant restraint system of claim 25 wherein the gas generant composition is a nonazide gas generant composition and the selective non-catalytic reducing compound is ammonium sulfate.
44. (new) The vehicle occupant restraint system of claim 27 wherein the gas generant composition is a nonazide gas generant composition and the selective non-catalytic reducing compound is ammonium sulfate.
45. (new) The vehicle occupant restraint system of claim 29 wherein said selective non-catalytic reducing compound is ammonium sulfate.
46. (new) The vehicle occupant restraint system of claim 31 wherein said gas generant composition is a nonazide composition and said selective non-catalytic reducing compound is ammonium sulfate.
47. (new) The vehicle occupant restraint system of Claim 31 wherein:  
said selective non-catalytic reducing compound is selected from the group consisting of ammonium carbonate  $((\text{NH}_4)_2\text{CO}_3)$ , ammonium sulfate  $((\text{NH}_4)_2\text{SO}_4)$ , ammonium chloride  $(\text{NH}_4\text{Cl})$ , ammonium carbamate  $(\text{H}_2\text{NCO}_2\text{NH}_4)$ , and ammonium fluoride  $(\text{NH}_4\text{F})$ .